

Please amend the claims as follows (a "marked-up" copy of the claim amendments is provided as an attachment to this response).

1. (Amended-Clean Text) A base station apparatus comprising:

a downlink transmission section that transmits a first signal with a directivity directed to a mobile station apparatus and a second signal with directivity wider than that of the first signal;

a reception section that receives a reception power ratio of the first signal to the second signal measured in the mobile station apparatus;

a determining section that determines whether the directivity of the first signal should be changed based on a difference between a transmission power ratio of the first signal to the second signal and the reception power ratio; and

a directivity control section that changes the directivity of the first signal based on a result of determination by the determining section.

3. (Amended-Clean Text) The base station apparatus according to claim 1, wherein, if the difference between the reception power ratio and the transmission power ratio is greater than a first threshold and the mobile station apparatus to which the first signal was transmitted requests the transmission power to be increased, the determining section determines that the directivity of the first signal should be changed.

4. (Amended-Clean Text) The base station apparatus according to claim 1,

wherein, if the difference between the reception power ratio and the transmission power ratio is greater than a first threshold and the reception power of a signal transmitted from the mobile station apparatus to which the first signal was transmitted is smaller than a second threshold, the determining section determines that the directivity of the first signal should be changed.

5. (Amended-Clean Text) The base station apparatus according to claim 1, further comprising a transmission power control section that controls transmission power of a transmission signal, the transmission power control section not changing the transmission power if the determining section determines that the directivity should be changed.

6. (Amended-Clean Text) The base station apparatus according to claim 1, wherein, if the determining section determines that the directivity should be changed, the directivity control section changes the directivity orientation without changing the width of the directivity.

7. (Amended-Clean Text) The base station apparatus according to claim 1, wherein, if the determining section determines that the directivity should be changed, the directivity control section broadens the width of directivity of the first signal, adjusts transmission power, changes the directivity orientation and returns the width of directivity to the original value.

8. (Amended-Clean Text) The base station apparatus according to claim 1, wherein, if the determining section determines that the directivity should be changed, the directivity control section broadens the width of directivity of the first signal, adjusts the directivity orientation and then returns the width of directivity to the original value.

9. (Amended-Clean Text) The base station apparatus according to claim 1, wherein the determining section sets a third threshold greater than a first threshold, and if the difference between the reception power ratio and the transmission power ratio is greater than the third threshold, determines that a directivity shift of the first signal is large, and if the difference between the reception power ratio and the transmission power ratio is greater than the first threshold and smaller than the third threshold, determines that the directivity shift of the first signal is small.

10. (Amended-Clean Text) The base station apparatus according to claim 9, wherein if the determining section determines that the directivity shift of the first signal is large, the directivity control section broadens the width of directivity to adjust the directivity, and if the determining section determines that the directivity shift of said first signal is small, the directivity control section does not change the width of directivity but changes the directivity orientation.

11. (Amended-Clean Text) The base station apparatus according to claim 9, wherein, if the determining section determines that the directivity shift of the first signal

is large, the directivity control section broadens the width of directivity, adjusts the directivity and then returns the width of the directivity to the original value, and if the determining section determines that the directivity shift of the first signal is small, the directivity control section does not change the width of directivity but changes the directivity orientation.

12. (Amended-Clean Text) A mobile station apparatus comprising:

a first measuring section that measures reception power of the first signal transmitted from the base station apparatus according to claim 1 to the mobile station;

a second measuring section that measures reception power of the second signal transmitted from the base station apparatus to an apparatus other than the mobile station;

and

an uplink transmission section that transmits measurement results of the first and second measuring sections to the base station apparatus.

13. (Amended-Clean Text) The mobile station apparatus according to claim 12, further comprising a reception power calculating section that calculates a reception power ratio, which is a ratio of the reception power of the first signal to the reception power of the second signal, wherein the uplink transmission section transmits the reception power ratio.

14. (Amended-Clean Text) The mobile station apparatus according to claim 13, wherein the reception power calculating section uses a common signal applicable to any mobile station apparatus as the second signal.

15. (Amended-Clean Text) A radio communication method, wherein a base station apparatus transmits a first signal having a directivity directed to a mobile station apparatus, transmits a second signal to an apparatus other than the mobile station apparatus with directivity wider than that of the first signal, the mobile station apparatus measures the reception power of the first signal and the second signal and transmits the measurement results to the base station apparatus, the base station apparatus measures a transmission power ratio which is a ratio of transmission power of the first signal to the transmission power of the second signal, measures a reception power ratio which is a ratio of the reception power of the first signal to the reception power of the second signal transmitted from the mobile station apparatus, determines whether the directivity of the first signal should be changed based on the difference between the transmission power ratio and the reception power ratio and changes the directivity of the first signal based on a determination result.

add
Please enter the following claim for consideration by the Examiner.

20. The base station apparatus according to claim 1, wherein when the difference between the transmission power ratio and the reception power ratio is greater